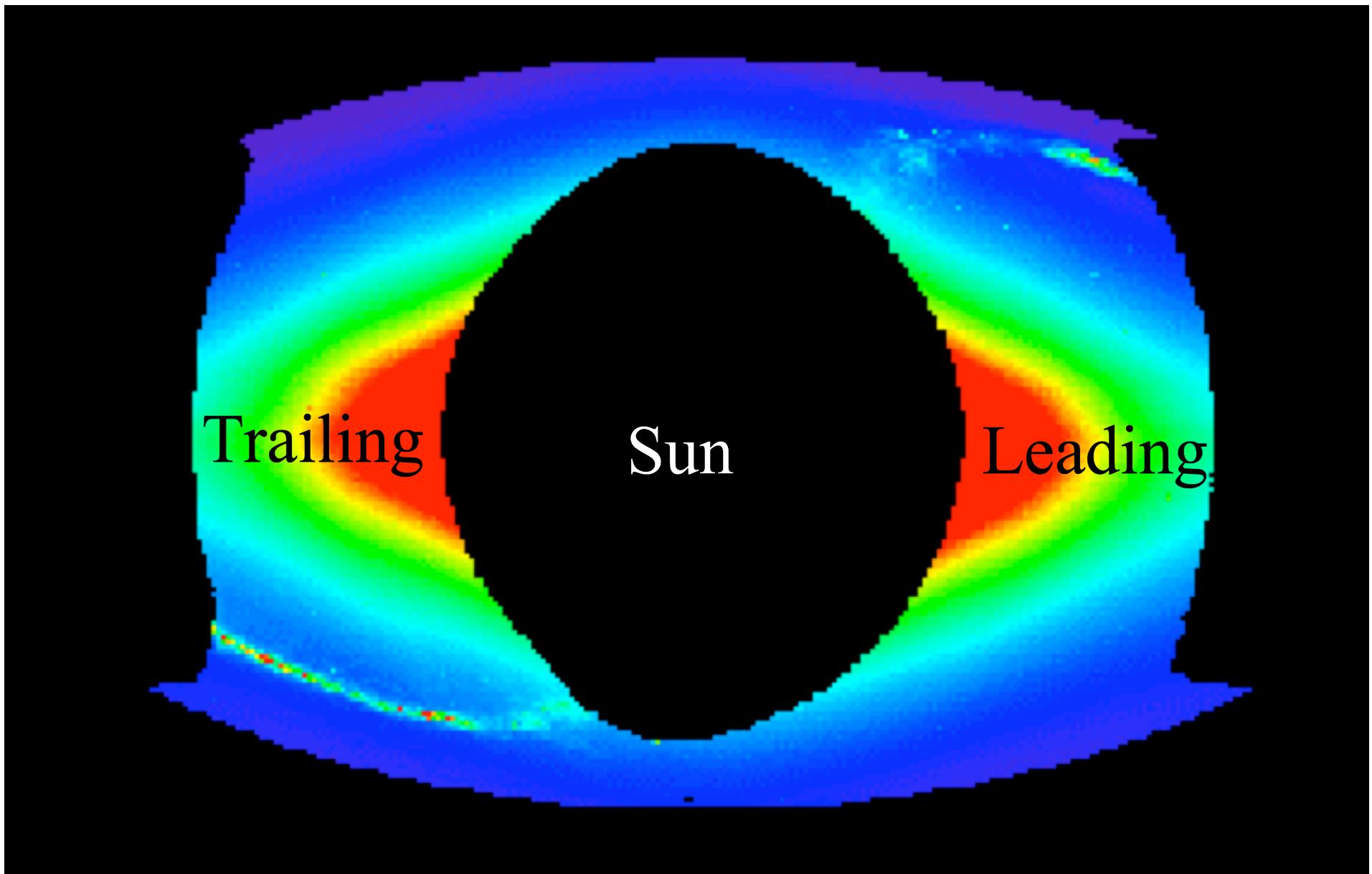
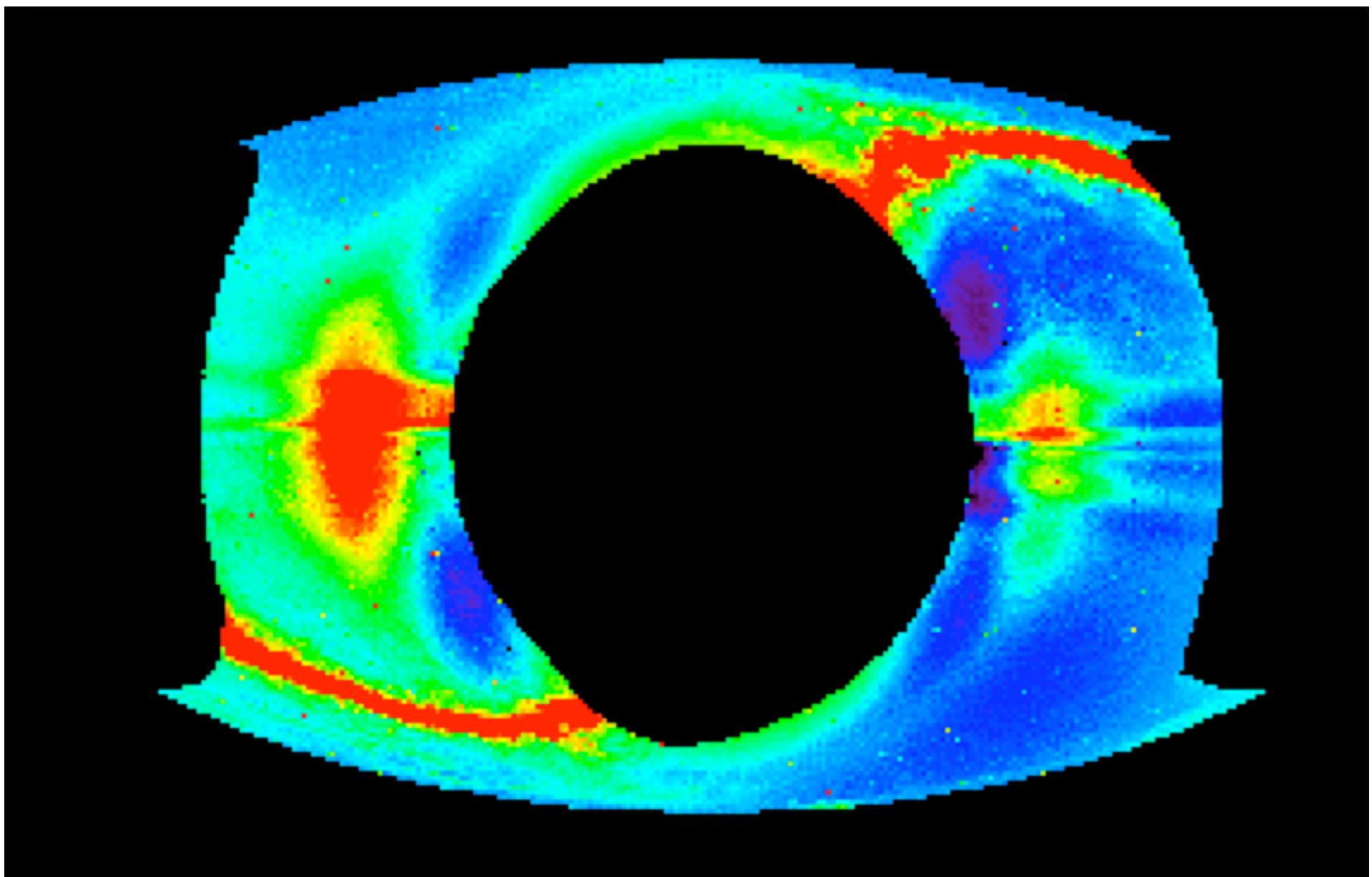


# Debris Disks - Theory & Modeling

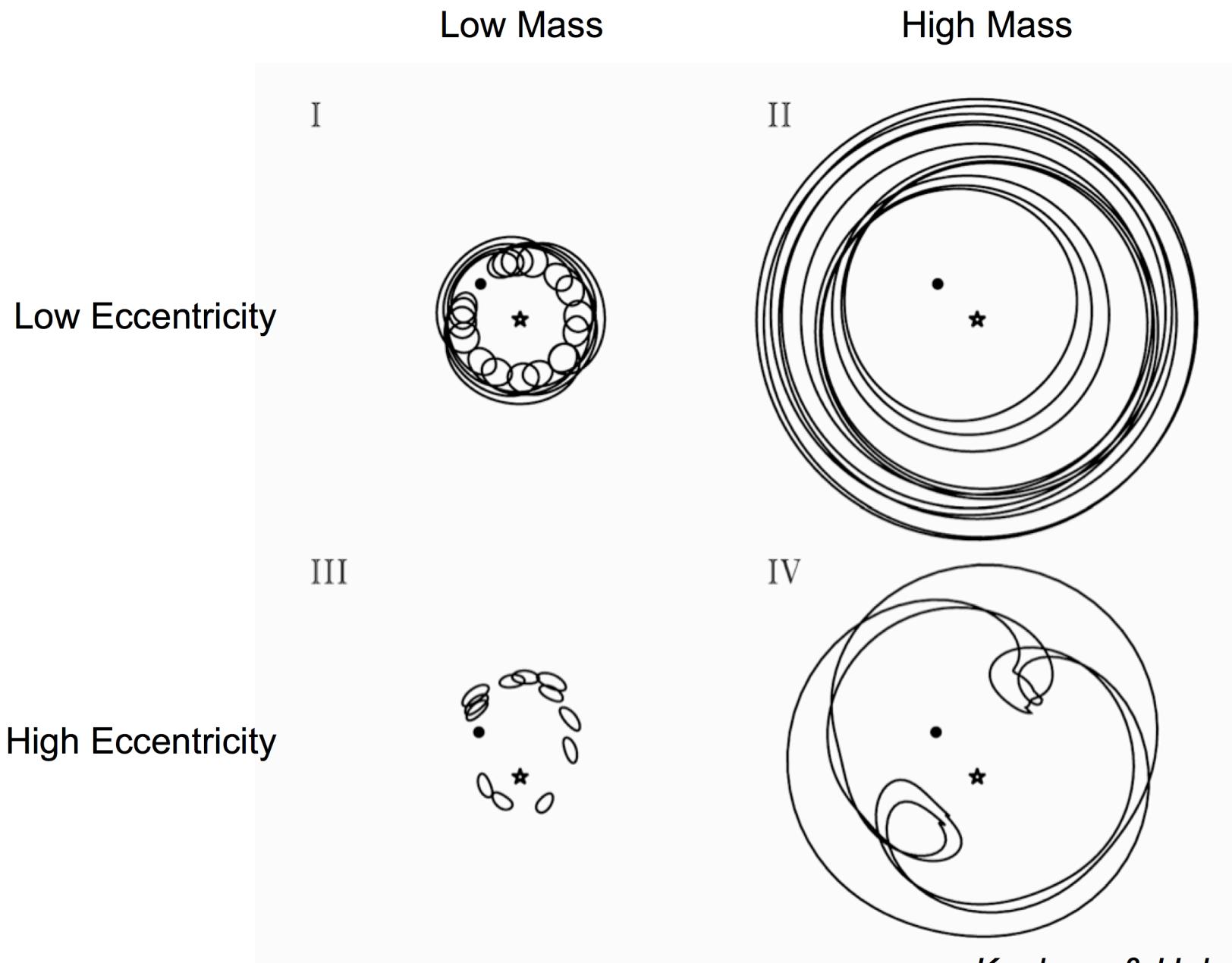
Christopher Stark  
U. of Maryland / NASA GSFC



Debris Disks  
Exoplanet Forum May 29-30, 2008



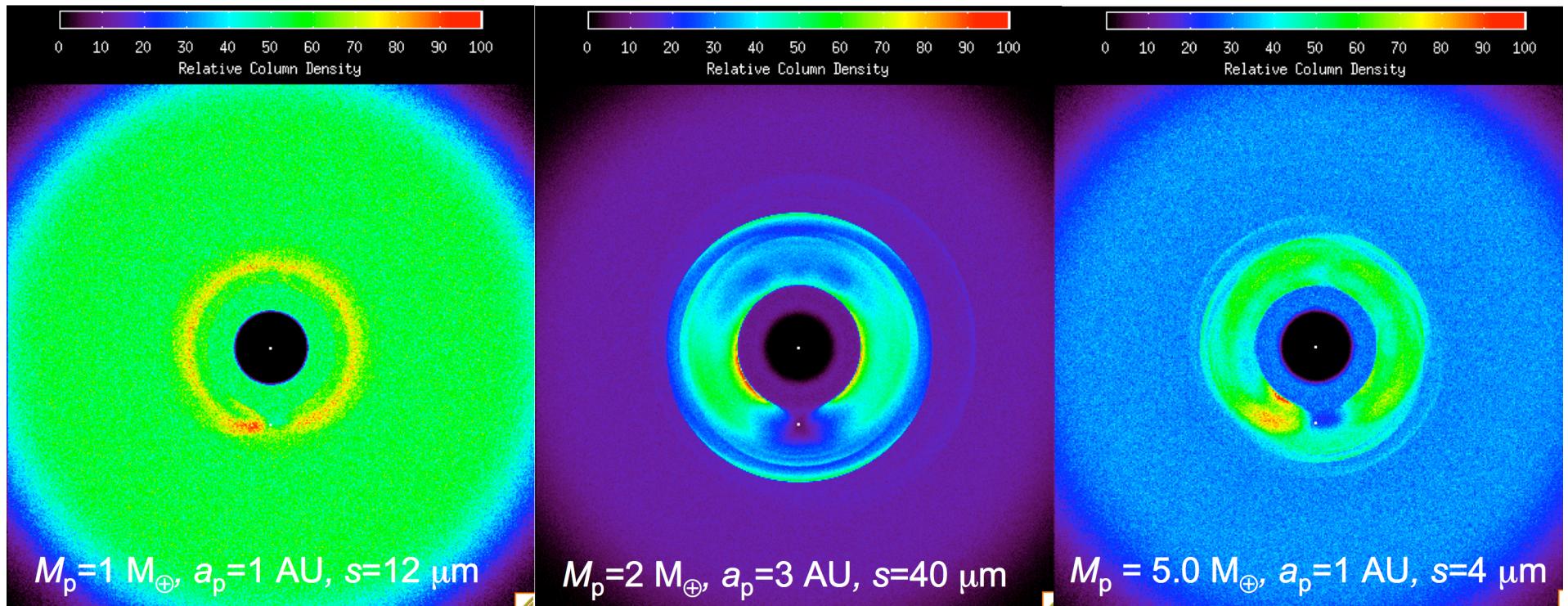
Debris Disks  
Exoplanet Forum May 29-30, 2008



Debris Disks  
Exoplanet Forum May 29-30, 2008

*Kuchner & Holman 2003*

# Predictions of Exozodiacal Structure

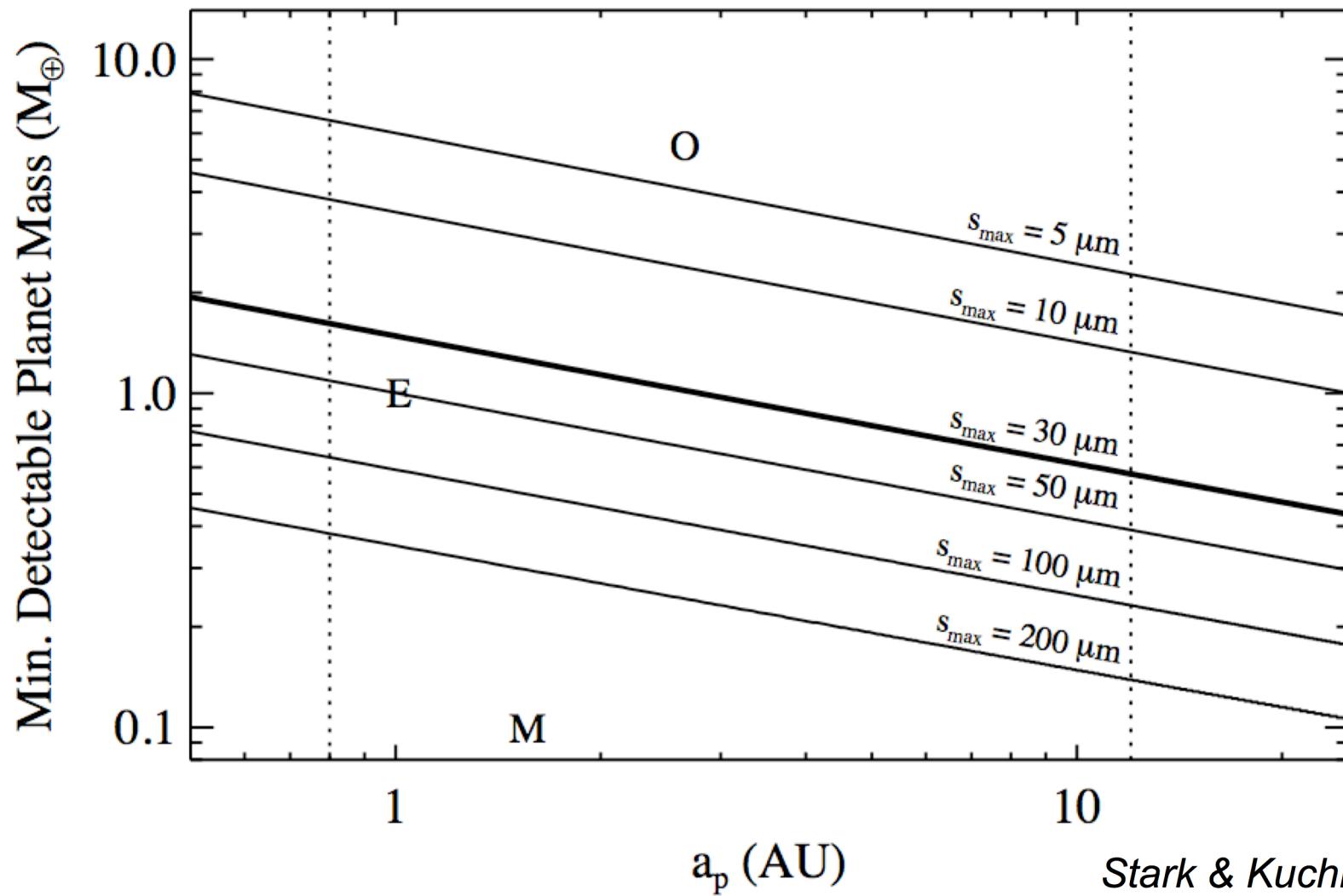


Catalog online @ <http://asd.gsfc.nasa.gov/Christopher.Stark/catalog.php>

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Stark & Kuchner 2008

# Predictions of Exozodiacal Structure

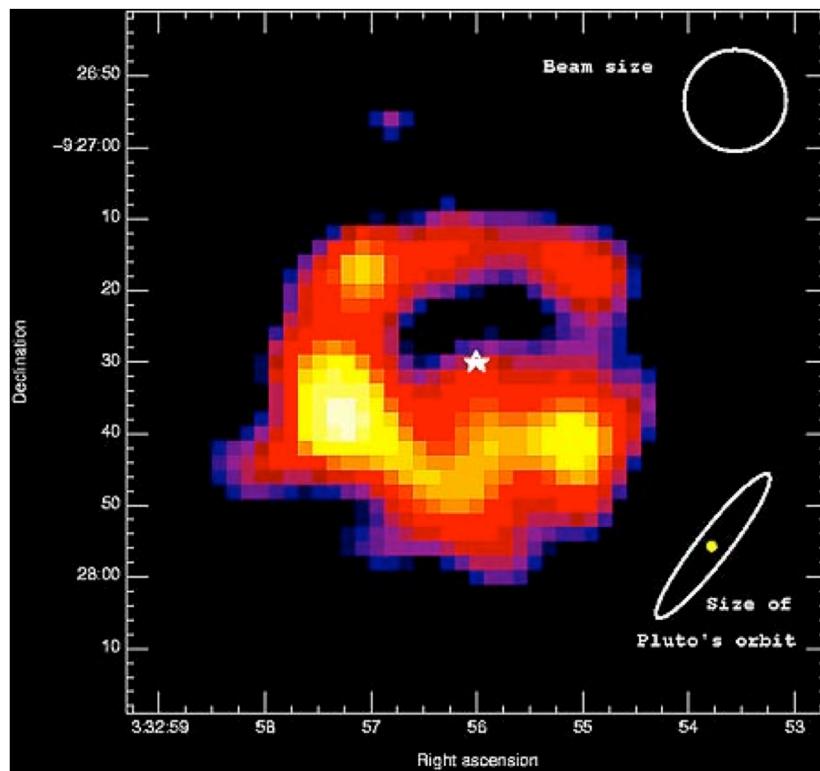


Stark & Kuchner 2008

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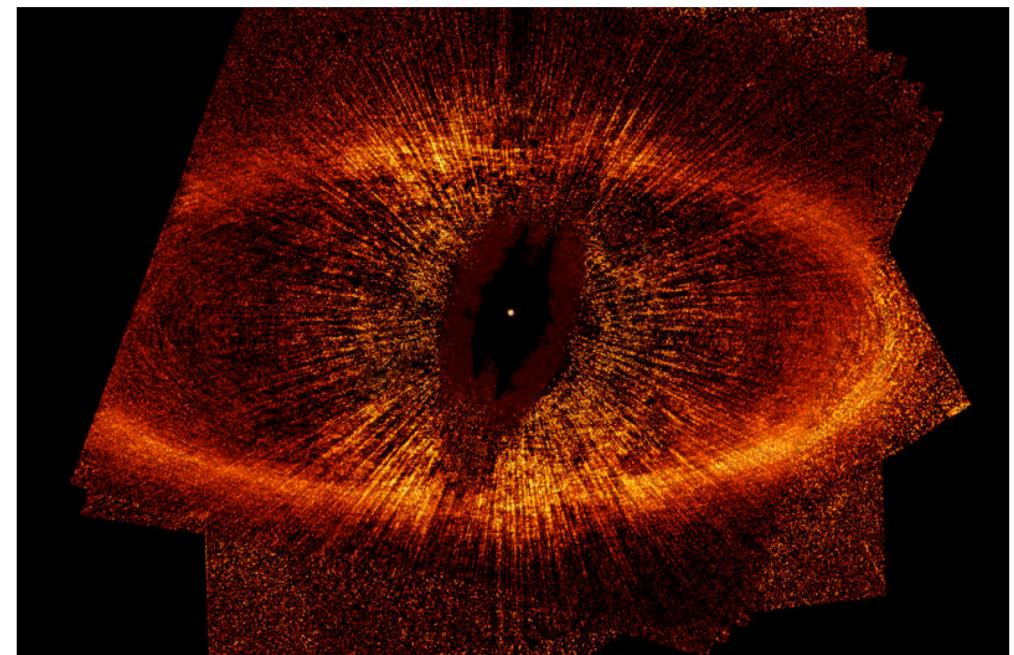
# Modeling Observed Structures

$\varepsilon$  Eri



Greaves et al. 1998

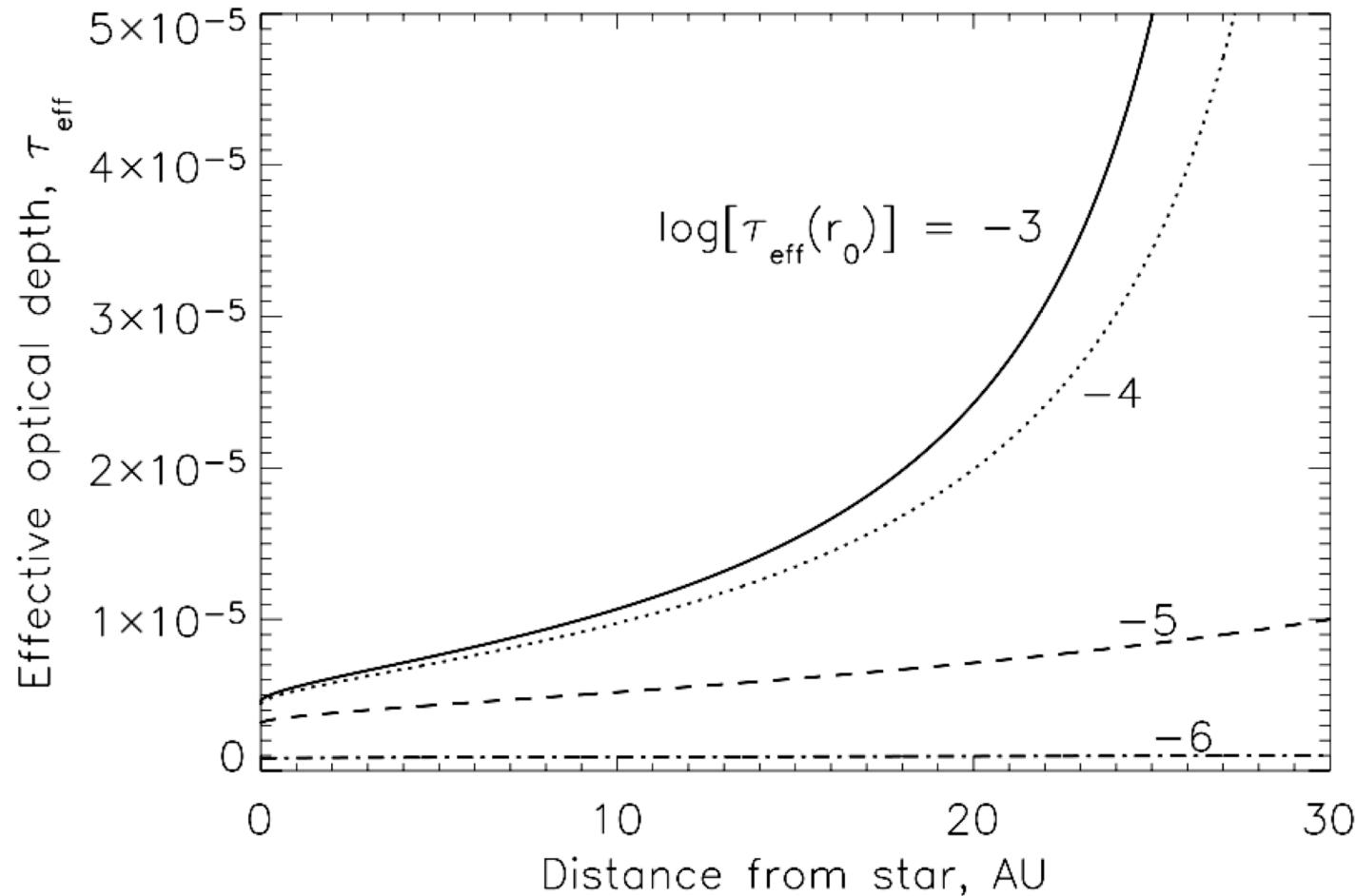
Fomalhaut



Kalas et al. 2005

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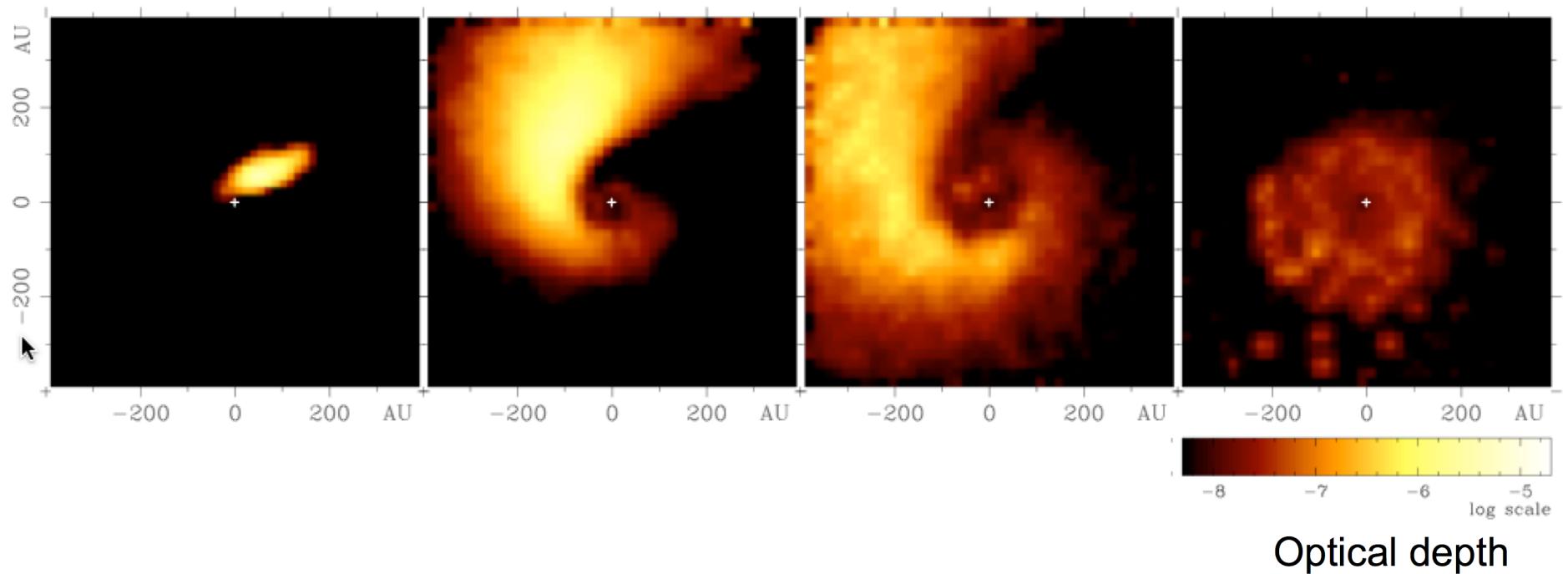
# Modeling Observed Structures: Collisions



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Wyatt 2005

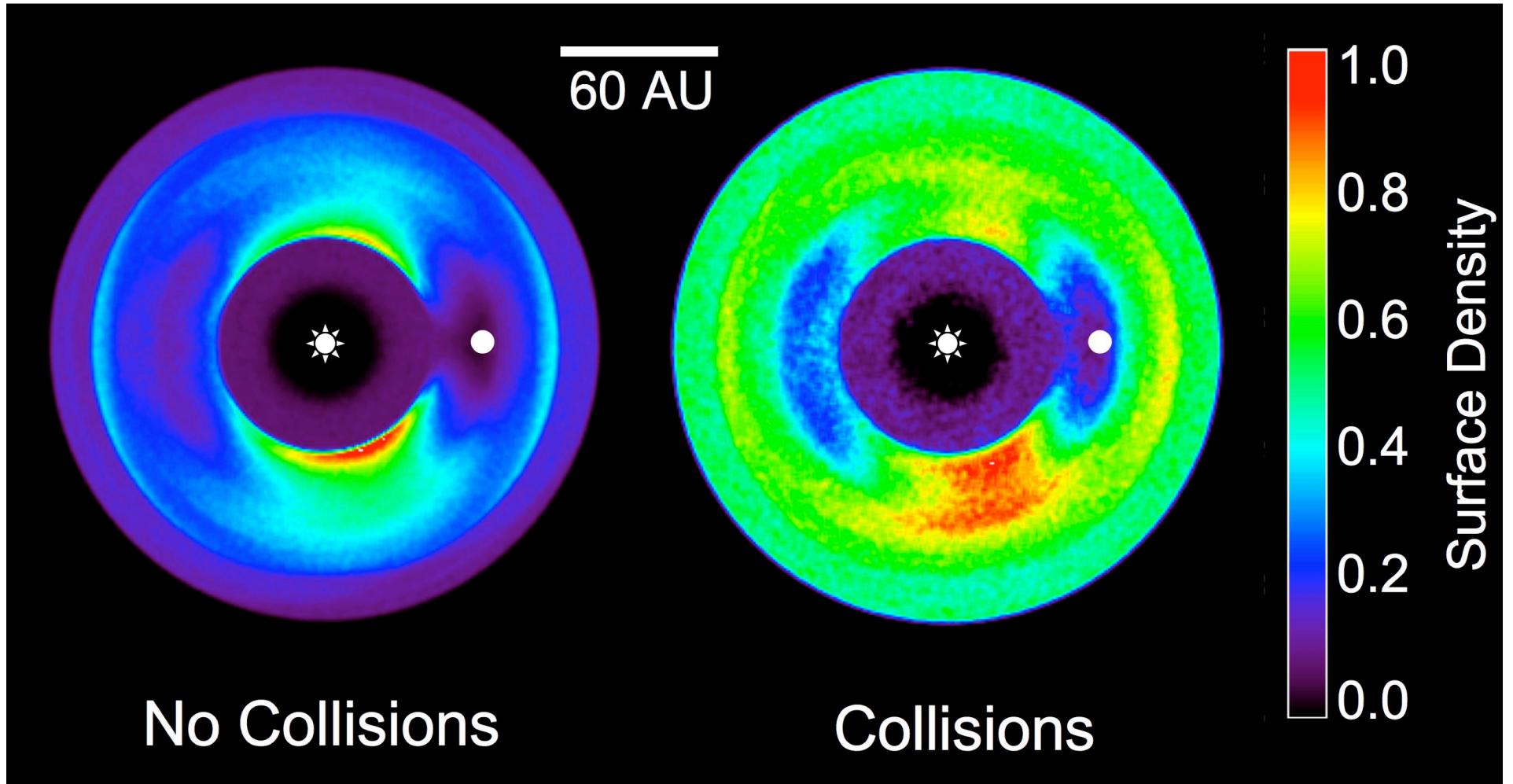
# Modeling Observed Structures: Collisions



*Grigorieva et al. 2007*

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# Modeling Observed Structures: Collisions



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# Debris Disk Theory & Modeling

- Robust theory & modeling program will allow us to decode structure in disks and investigate dust transport
- Collisional codes will allow direct application to currently-observed systems
- Observations of resonant structure due to a known planet on a known orbit will enable models to be calibrated